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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,553	02/26/2004	Sheng-Ming Chang	14257 B	7046
36672	7590	01/06/2006	EXAMINER	
CHARLES E. BAXLEY, ESQ. 90 JOHN STREET THIRD FLOOR NEW YORK, NY 10038			BINDA, GREGORY JOHN	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,553	CHANG, SHENG-MING	
	Examiner	Art Unit	
	Greg Binda	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on various is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(u)(1) because the views are improperly grouped. Fig. 6 appears on the second sheet, but Fig. 5 does not appear until the fourth sheet.
3. The drawing changes filed November 3, 2005 are approved.

Specification

4. The disclosure is objected to because:
 - a. The detailed description of Fig. 8 which begins at page 6, line 26, has been amended so that it states "the connecting shaft 10 and the socket 31 are allowable to be rotated relative to each other". However, the shaft 10 and socket 31 cannot rotate relative to each other, while they are connected to each other. They can only pivot relative to each other. Likewise, the detailed description of Fig. 9 has been amended to incorrectly state the shaft 30 and socket 51 can be rotated relative to each other.
 - b. Page 7, lines 1 & 2, as amended, incorrectly describes Fig. 8 showing "positioning rubber 15 engages with the first positioning rove 223".

Claim Rejections - 35 USC § 112

5. Claims 8-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 8 & 12, lines last recite the limitation, “[said positioning balls] allow the socket to be rotated relative to said connecting shaft.”. However, there is no structure which would allow the socket and shaft to rotate relative to each other yet still remain connected to each other. The positioning balls 32 & 33 instead allow the socket 31 to be pivoted relative to the connecting shaft 10/30 (see Fig. 9) while the shaft and socket are connected together..

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8, 10 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazebrook et al, US 4,941,862 (Hazebrook). Figs. 15 & 16 show a connecting shaft device comprising: a connecting shaft 77 including a fixed connecting part (not shown in Figs. 15 & 16, but examples are shown on the connecting shafts 55 & 57 in Fig. 14) on one end, and a connecting part on the other end for connecting to a socket 75 and including an axial hole

formed in the connecting part, and including two ball holes formed on two sides of the connecting part respectively and communicating with the axial hole thereof; two positioning balls 83 engaged in the ball holes; an axial rod 81 slidably engaged within the axial hole, and including two concave grooves 81a formed in one end thereof corresponding to the ball holes' and a sliding control element 82 slidably engaged onto the connecting shaft and connected to the axial rod for sliding the axial rod relative to the connecting shaft and to move the concave grooves to control the positioning of the balls. Fig. 15 shows the connecting shaft 77 fixed to the socket 75. Fig. 16 shows the connecting shaft 77 unfixed from the socket 75 (as such, the shaft and socket can rotate relative to each other). Fig. 14 shows the connecting shaft 55 with a shoulder that engages with the socket 56. Although Hazebrook does not expressly disclose the balls 83 being made from steel, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use steel balls, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. (See *SAE Universal Joint and Driveshaft Design Manual*, page 150, first column, third paragraph, where balls like those in Hazebrook are disclosed as being made from steel.)

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Trojanowski and McHenry each show a connecting shaft. *SAE Universal Joint and Driveshaft Design Manual* discloses at page 150, first column, third paragraph, that the balls in universal joints are typically made from steel.

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679